

ATTACHMENT J11

Lackland AFB Electric Distribution System

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J11 Lackland AFB Electric Distribution System

J11.1 Lackland AFB Overview

Lackland AFB, located approximately 8 miles southwest of downtown San Antonio in Bexar County, Texas, is an Air Education and Training Command (AETC) installation that annually provides basic military training for more than 35,000 recruits entering the USAF, Air National Guard (ANG), and Air Force Reserve (AFR). The Base also hosts professional, technical, and English language training for approximately 36,000 students from all military services. The host command is the 37th Training Wing (37 TRW). The Base also hosts more than 35 tenant units; the primary tenants include:

- 59th Medical Wing, Wilford Hall Medical Center
- Air Force Security Forces Center
- Medina Regional Signal Intelligence (SIGINT) Operations Center
- 76th Munitions Squadron
- 369th Recruiting Group
- Force Protection Battlelab

Lackland AFB occupies 6,725 acres divided into two areas: the main Base occupies 2,752 acres, and the Training Annex, located 1 mile west, occupies 3,973 acres. The Base contains approximately 1,400 buildings totaling over 11 million square feet (sf).¹

The Base has a total population of approximately 20,000, including military personnel, civilian employees and support personnel, and dependents. In addition, more than 9,000 students are housed at the Base on an average day.

Recent Base Realignment and Closure (BRAC) actions have transferred several missions from Kelly AFB to Lackland AFB. These include Kelly's flightline and its associated missions and facilities, such as the 433rd Military Airlift Wing, the 149th Air National Guard, and HQ Air Intelligence Agency.

Programmed major construction projects include new administrative, training, industrial, and community facilities; new and renovated housing; and utilities alterations/improvements to accommodate the realignment of Kelly AFB. Key projects planned for Lackland AFB will increase the total square footage of buildings on Base by about 4 percent. Key projects programmed for Wilford Hall Medical Center may increase the medical center's total square footage by about 1.2 percent.

¹ The nonresidential structures include offices, industrial maintenance and repair facilities, and community service facilities (e.g., schools and Wilford Hall Medical Center). The housing units include detached single residences, duplexes, townhouses, student dormitories, and recruit facilities.

J11.2 Electric Distribution System Description

J11.2.1 Electric Distribution System Fixed Equipment Inventory

The Lackland AFB electric distribution system consists of all appurtenances physically connected to the distribution system from the point in which the distribution system enters the Installation and Government ownership currently starts to the point of demarcation, defined by the Right of Way. The system may include, but is not limited to, transformers, circuits, protective devices, utility poles, ductbanks, meters, switches, lighting on poles (street, parking, security, and ball field), and other ancillary fixed equipment. Lighting on poles includes the footings, pole, fixtures, sensors, and electric cable from point of demarcation defined in the Right of Way. The actual inventory of items sold will be established in the Bill of Sale at the time the system is transferred. The following description and inventory is included to provide the Contractor with a general understanding of the size and configuration of the distribution system. The Government makes no representation that the inventory is accurate. The Contractor shall base its proposal on site inspections, information in the technical library, other pertinent information, and to a lesser degree the following description and inventory. Under no circumstances shall the Contractor be entitled to any service charge adjustments based on the accuracy of the following description and inventory.

Specifically excluded from the electric distribution system privatization are:

- Airfield lighting, airfield vaults, and all associated equipment.
- Security lights that are mounted directly on buildings.
- All electrical utilities on Kelly AFB, including the 433rd Military Airlift Wing, the 149th Texas Air National Guard, and the HQ Air Intelligence Agency, which will be realigned under Lackland AFB as a part of base closure.

J11.2.1.1 Description

Current electric power at Lackland AFB Main Base and Training Annex is supplied through four 13.8-kilovolt (kV) distribution circuits from the CPS Medina Substation. A CPS-owned and -maintained distribution circuit that is not part of the Base distribution system crosses Lackland AFB from the Medina Substation and splits into north and south branches. There are no tie switches between this circuit and any of the Base's distribution circuits, and this circuit has only a few joint-use or shared structures with the Base distribution system. The Contractor shall be required to grant CPS access to all joint use or shared structures IAW Clause C.13.

Three feeders supply power to the Main Base through a switching station (constructed in the 1990s) located on the east side of the Main Base. This station consists of four main incoming breakers (one is currently a spare), four ring bus tie breakers, and nine feeder breakers; these breakers are all rated at 15 kV, 1,200 amperes, 500 megavolt-amperes (MVA). The switching station feeds the Main Base through seven circuits (numbered 1 through 7) from the nine available feeder breakers. These circuits exit the switching station underground and have 500 thousand-circular-mil (MCM) copper cable for the underground getaway. The distribution circuits are multi-grounded, four-wire wye systems rated for 7.96/13.8 kV and operate at approximately 13.6 kV. The main distribution feeders of these circuits are generally 336 aluminum conductor steel reinforced (336 ACSR). All of the

circuits have backfeed capabilities; each circuit is tied to at least one other circuit by means of a gang-operated switch. Two of the circuits (2 and 7) are dedicated as backups for Wilford Hall Medical Center.

One 13.8-kV distribution circuit from the CPS Medina Substation feeds the Training Annex through the Medina Annex switching station (constructed in the 1980s) located on the east side of the Training Annex. This switching station consists of outdoor metal-clad gear with one incoming breaker and four outgoing breakers. The switching station feeds the Training Annex through four distribution circuits. Like the Main Base circuits, the Training Annex distribution circuits are multi-grounded, four-wire wye systems rated for 7.96/13.8 kV and operate at approximately 13.6 kV. These circuits exit the switching station underground but transition to overhead lines through riser poles outside the station; the distribution circuits are primarily overhead.

The overhead portions of the distribution system were upgraded in the early 1990s by replacing wood crossarms with narrow-profile assemblies and replacing much of the copper conductor with ACSR conductor.

J11.2.1.2 Inventory

Table 1 provides a general listing of the major electric distribution system fixed assets for the Lackland AFB electric distribution system included in the sale.

TABLE 1

Fixed Inventory

Electric Distribution System Inventory Lackland AFB

Item	Size	Quantity	Unit	Approximate Year of Construction
Substations				
Main		1	EA	1995
Annex		1	EA	1985
Underground Circuits				
	AWG	Length (ft)		
3ph, 4w, 15000V, in conduit	#2	9,450	LF	1995
1ph, 2w, 15000V, in conduit	#2	2,340	LF	1995
3ph, 4w, 15000V, in conduit	#4	700	LF	1995
3ph, 4w, 15000V, in conduit	#1	15,600	LF	1995
1ph, 2w, 15000V, in conduit	#1	2,100	LF	1995
3ph, 4w, 15000V, in conduit	#1/0	24,375	LF	1995
3ph, 4w, 15000V, direct burial	#1/0	700	LF	1995
3ph, 4w, 15000V, in conduit	#2/0	1,000	LF	1995
3ph, 4w, 15000V, in conduit	#4/0	5,000	LF	1995
3ph, 4w, 15000V, direct burial	#4/0	400	LF	1995
3ph, 4w, 15000V, in conduit	#250	2,025	LF	1995
3ph, 4w, 15000V, in conduit	#350	1,050	LF	1995
3ph, 4w, 15000V, in conduit	#500	16,125	LF	1995
3ph, 4w, 15000V, in conduit	#750	4,825	LF	1995
Overhead Circuits				
1 ph, 2 w, CU conductor	#1/0	2725	LF	1965
3 ph, 4 w, CU conductor	#2/0	2200	LF	1965
3 ph, 4 w, CU conductor	#1	350	LF	1965
3 ph, 4 w, CU conductor	#2	175	LF	1965

Item	Size	Quantity	Unit	Approximate Year of Construction
2 ph, 3 w, CU conductor	#2	525	LF	1965
3 ph, 4 w, CU conductor	#4	19975	LF	1965
2 ph, 3 w, CU conductor	#4	2325	LF	1965
1 ph, 2 w, CU conductor	#4	5650	LF	1965
3 ph, 4 w, CU conductor	#6	4200	LF	1965
1 ph, 2 w, CU conductor	#6	3800	LF	1965
3 ph, 4 w, AL conductor	#336	85950	LF	1965
3 ph, 4 w, AL conductor	#1/0	1050	LF	1965
3 ph, 4 w, AL conductor	#4/0	4625	LF	1965
3 ph, 4 w, AL conductor	#2	76798	LF	1965
2 ph, 3 w, AL conductor	#2	3050	LF	1965
1 ph, 2 w, AL conductor	#2	52370	LF	1965
3 ph, 4 w, AL conductor	#4	725	LF	1965
1 ph, 2 w, AL conductor	#4	2650	LF	1965
Transformers	Nom kVA	No.		
3-Phase	30	0	EA	1995
3-Phase	45	2	EA	1995
3-Phase	75	4	EA	1995
3-Phase	112.5	8	EA	1995
3-Phase	150	26	EA	1995
3-Phase	225	33	EA	1995
3-Phase	300	46	EA	1995
3-Phase	500	37	EA	1995
3-Phase	750	32	EA	1995
3-Phase	1000	10	EA	1995
3-Phase	1500	10	EA	1995
1-Phase (POLE MOUNT)	5	27	EA	1965
1-Phase (POLE MOUNT)	10	83	EA	1965
1-Phase (POLE MOUNT)	15	54	EA	1965
1-Phase (POLE MOUNT)	25	134	EA	1965
1-Phase (POLE MOUNT)	37.5	88	EA	1965
1-Phase (POLE MOUNT)	50	172	EA	1965
1-Phase (POLE MOUNT)	75	63	EA	1965
1-Phase (POLE MOUNT)	100	34	EA	1965
1-Phase (POLE MOUNT)	167	3	EA	1965
1-Phase (POLE MOUNT)	250	3	EA	1965
1 Phase (PAD MOUNT)	15	1	EA	1995
1 Phase (PAD MOUNT)	45	3	EA	1995
1 Phase (PAD MOUNT)	50	10	EA	1995
1 Phase (PAD MOUNT)	75	2	EA	1995
1 Phase (PAD MOUNT)	100	6	EA	1995
1 Phase (PAD MOUNT)	167	3	EA	1995
3 Phase (PAD MOUNT)	50	6	EA	1995
3-Phase (PAD MOUNT)	2500	1	EA	1995
Utility Poles	Height (ft)	No.		
PRIMARY	25	1	EA	1965
SECONDARY	30	188	EA	1965

Item	Size	Quantity	Unit	Approximate Year of Construction
PRIMARY	35	118	EA	1965
SECONDARY	35	145	EA	1965
PRIMARY	40	882	EA	1965
SECONDARY	40	28	EA	1965
PRIMARY	45	626	EA	1965
SECONDARY	45	23	EA	1965
PRIMARY	50	98	EA	1965
SECONDARY	50	6	EA	1965
PRIMARY	55	10	EA	1965
SECONDARY	55	6	EA	1965
PRIMARY	60	1	EA	1965
	Other	101	EA	1965
Switches	3-Way	5	EA	1995
	4-Way	22	EA	1995
	5-Way	1	EA	1995
	6-Way	2	EA	1995
Regulators	1 -Phase	3	EA	
	3 -Phase	1	EA	
Capacitor banks		7	EA	
Vaults	Utility	113	EA	1995
Lighting		3350	EA	1985
Traffic Lights		20	EA	1985

Notes:

ea = each

lf = linear feet

Nom kVA = nominal kilovolt-amperes

ph = phase

AWG = American Wire Gauge

J11.2.2 Electric Distribution System Non-Fixed Equipment and Specialized Tools Inventory

Table 2 lists other ancillary equipment (spare parts) and **Table 3** lists specialized vehicles and tools included in the sale. Offerors shall field verify all equipment, vehicles, and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment, vehicles, and tools.

TABLE 2

Spare Parts

Electric Distribution System Lackland AFB

Description	Size	Quantity	Manufacturer
Rubber Gloves	Class 2 Size 8 1/2	9	NA
Rubber Gloves	Class 2 Size 9	26	NA
Rubber Gloves	Class 2 Size 9 1/2	12	NA
Rubber Gloves	Class 2 Size 10	17	NA
Rubber Gloves	Class 2 Size 10 1/2	19	NA
Cutter, Cable	8'	2	NA
Extendo Stick	40' 8 Section	8	NA
Extendo Stick	30' 6 Section	3	NA
Shotgun	6'	4	NA
Shotgun	9'	3	NA
Shotgun	10'	1	NA

Description	Size	Quantity	Manufacturer
Hot Stick	8'	6	NA
Hot Stick	10'	1	NA
Ampretong	4'	1	NA
Isolating Link Stick	2'	4	NA
Grounding Cluster	3 Piece 8'	2	NA
Loadbreak Tool	4'	1	NA
Hot Stick	3'	2	NA
Pole Guard	6'	6	NA
Hose, Straight		16	NA
Hose, Connector End		19	NA
Blanket, Hotline	36 x 36	4	NA
Blanket, Hotline	36 x 36 Slotted	2	NA
Cover, Cutout		7	NA
Cover, Insulator		10	NA

TABLE 3
Specialized Vehicles and Tools
Electric Distribution System Lackland AFB

Description	Quantity	Location	Maker
Pole Pike, 12'	5 ea.		
Pole Pike, 8'	7 ea.		
Shovel, Scoop, 10"	3 ea.		
Climbing Belt	9 ea.		
Strap Leather Climbing	4 ea.		
Gaff Climbing	6 ea.		
Gaff Pads	12 ea.		
Bag, Climbing Gear	6 ea.		
Sling 18" Pole	6 ea.		
Tag Lines	6 ea.		
Hand Lines	3 ea.		
Sling Auger	6 ea.		
Saw, 12" Hydraulic	2 ea.		
Hydraulic Tamper	2 ea.		
Hydraulic Drill/Impact Wrench	3 ea.		
Hydraulic Crimper	1 ea.		
Loadbuster Loadbreak Tool	2 ea.		
Crimper, Hydraulic Hand Operated w/Dies	1 ea.		
Cable Prep Tool Kit	1 ea.		
Hydraulic Bits, Socket Kit			

J11.2.3 Electric Distribution System Manuals, Drawings, and Records Inventory

Table 4 lists the manuals, drawings, and records that will be transferred with the system.

TABLE 4
Manuals, Drawings, and Records
Electric Distribution System Lackland AFB

Qty	Item	Description	Remarks
1	CD	Utility System Drawings	Electric Distribution System

Qty	Item	Description	Remarks
1	Electrical System Maps	Electrical Distribution for Main Base @ 1"=400' and 1"=100'	Mylar; Tab G-4, 1 Sheet and 36 Sheets @ 1"=100'
1	Electrical System Maps	Electrical Distribution for Main Base @ 1"=400' and 1"=100'	Mylar; Tab G-4, 1 Sheet and 28 Sheets @ 1"=100'
1	Electrical System Maps	LAFB Electrical Upgrade DACA 63-91-C-0183 WITH SWITCHING STATION PLAN	Mylar; Sheets E-1 through E-5

J11.3 Specific Service Requirements

The service requirements for the Lackland AFB electric distribution system are as defined in the Section C, *Description/Specifications/Work Statement*. The following requirements are specific to the Lackland AFB electric distribution system and are in addition to those found in Section C. If there is a conflict between requirements described below and Section C, the requirements listed below take precedence over those found in Section C.

- The Contractor shall coordinate with the Base Civil Engineer or equivalent agency as designated by the contracting officer any changes to the street lights or security lights that may affect blackout procedures during Government operations.
- The Contractor shall coordinate with the Base Civil Engineer or equivalent agency as designated by the contracting officer any changes to the obstruction lights on power poles that may affect blackout procedures during Government operations.
- The Contractor shall provide monthly meter reading reports IAW Paragraph J11.6, and that meet the following requirements:

The Contractor shall keep meter books with monthly consumption and demand (if applicable) for each meter reading. Meter books shall also include building address or facility number, meter number, previous month readings, current month readings, multipliers for each meter, total monthly consumption, points of contact for meter questions, and procedure for converting meter reads into consumption (including multipliers). The Contractor shall coordinate with the Government to determine the format for meter books to be delivered.

- The Contractor shall enter into a Memorandum of Understanding with the Lackland Air Force Base Fire Department for fire protection of all facilities included in the purchase of the utility. The Contractor shall abide by Lackland AFB fire protection requirements. The Contractor shall maintain the fire alarm system for all facilities included in the purchase of the utility. The Contractor shall permit Fire Department personnel access to their facilities to perform fire inspections and emergency response.
- IAW Paragraph C.9.8, Exercises and Crisis Situations Requiring Utility Support, the Contractor shall provide support as directed by the Lackland Air Force Base Civil Engineer Control Center or equivalent agency for exercises and crisis situations.
- Contractor shall recalibrate all secondary electric meters once every 5 years.
- IAW Paragraph C.6 and the Right of Way, the Contractor shall coordinate with Air Intelligence Agency (AIA) personnel and obtain clearance with proper escort prior to entering the AIA restricted area (located on the Training Annex).

- For all privatized lighting fixtures, operations and maintenance of lighting fixtures includes the purchase and replacement of the lighting element and the removal and disposal of replaced lighting element.
- In accordance with paragraph C.5.1.3, *Contractor Facilities*, all new and renewal electric utility services shall be placed underground unless otherwise agreed to by both parties.
- Air Intelligence Agency (AIA) area power requirements shall comply with the following:
 - Voltage - must be within plus or minus 5% tolerance of the system design voltage. If steady state voltage variation exceeds this tolerance, then provide voltage regulation
 - Availability - provide 99.99% availability (exclusive of scheduled outages) and not in excess of 53 minutes total outage during any one year
 - Dynamic of Transient Variation - shall not exceed five occurrences a month under average operating conditions.

J11.4 Current Service Arrangement

Lackland AFB currently purchases electric power from CPS, a municipal utility. The Air Force however, may enter into agreements in the future to purchase power from other wholesalers.

Current average electrical power usage at Lackland AFB Main Base and Training Annex is approximately 164 million kilowatt-hours (kWh) per year. The peak demand for Fiscal Year 1998 was 29.8 megawatts.

J11.5 Secondary Metering

The Installation may require secondary meters for internal billings of their reimbursable customers, utility usage management, and energy conservation monitoring. The Contractor shall assume full ownership and responsibility for existing and future secondary meters IAW Paragraph C.3.

J11.5.1 Existing Secondary Meters

Table 5 provides a listing of the existing (at the time of contract award) secondary meters that will be transferred to the Contractor. The Contractor shall provide meter readings once a month for all secondary meters IAW Paragraph C.3 and J11.6 below.

TABLE 5
Existing Secondary Meters
Electric Distribution System Lackland AFB

Building	Building Description	Meter Description
114	MEDICAL CLINIC K	Meter No: 64034240
115	CENTRAL CHILLER PLT V	Meter No: 70418206
118	COMMUNITY ACTIVITY CENTER	Meter No: 76354973
118	COMMUNITY ACTIVITY CENTER	Meter No: 70418776
145	BX FACILITY	Meter No: 14614090
146	37 TRG CLASSROOM V	Meter No: 70419328
146	37 TRG CLASSROOM V	Meter No: 70418205

Building	Building Description	Meter Description
147	37 TRG CLASSROOM V	Meter No: 70419349
147	37 TRG CLASSROOM V	Meter No: 70418210
147	37 TRG CLASSROOM V	Meter No: 70418771
150	DINING HALL V	Meter No: 63185242
156	STUDENT QUARTERS V	Meter No: 63185243
167	ELEC SUBSTAN 181/300 AREAS V	Meter No: 30975343
181	SATCOM (4 FAC) N	Meter No: 75840746
390	SATCOM (SATELITE COMM) N	Meter No: 79137366
400	OPERATIONS AREA W	Meter No: 84405881
400	OPERATIONS AREA W	Meter No: 84310955
410	IS OPERATIONS N	Meter No: 82303635
421	MUNITIONS SHOP B	Meter No: 84405691
421	MUNITIONS SHOP B	Meter No: 84405687
421	MUNITIONS SHOP B	Meter No: 87131565
421	MUNITIONS SHOP B	Meter No: 84405691
421	MUNITIONS SHOP B	Meter No: 87131563
431	TECH TRAINING MAINTENANCE B	Meter No: 84405690
431	TECH TRAINING MAINTENANCE B	Meter No: 87131564
431	TECH TRAINING MAINTENANCE B	Meter No: 87131562
431	TECH TRAINING MAINTENANCE B	Meter No: 84405688
468	TECH TRAINING CLASSROOMS B	Meter No: 68292194
600	CAPEHART HOUSING	Meter No: 84783576
1050	COMMUNICATIONS CENTER V	Meter No: 64034245
1201	FY82 UEPH B	Meter No: 70309029
1205	FY82 UEPH B	Meter No: 70309030
1209	FY82 UEPH B	Meter No: 70300258
1245	37 SUPPORT GROUP K	Meter No: 84949783
1249	FAMILY SUPPORT CENTER K	Meter No: 84129388
1251	37 TRW/PLANS K	Meter No: 85020637
1286	BASE RESTAURANT (BK)	Meter No: 78185079
1288	GATEWAY THEATER	Meter No: 62232343
1298	LACKLAND FED CREDIT UNION	Meter No: 64481075
1365	CENTRAL CHILLER PLANT V	Meter No: 84010180
1365	CENTRAL CHILLER PLANT V	Meter No: 70419333
1385	MAIN BX FACILITY	Meter No: 85627032
1407	FY82 UEPH(1400/1405/1410) B	Meter No: 70400001
1465	BX TOY/GARDEN/B BONNET DH	Meter No: 76296851
1508	BX SERVICE OUTLET	Meter No: 62161921
1528	LACKLAND CHAPEL # 3 N	Meter No: 76395703
1539	WHERRY/ZACHRY HOUSING	Meter No: 84783577
167A	CPS METER FACILITY B	Meter No: 549854
2300	MITCHELL HALL	Meter No: 80039867
2306	SHOPPETTE	Meter No: C94110319H
2325	FIRE STATION N	Meter No: 86408137
2418	WARHAWK GYMNASIUM W	Meter No: 64034236
2435	VISITING OFFICERS QTRS N	Meter No: 86408123
2443	VISITING OFFICERS QRTS N	Meter No: 86408151

Building	Building Description	Meter Description
2447	VISITING OFFICERS QTRS N	Meter No: 86408124
2449	VISITING OFFICERS QTRS N	Meter No: 86408131
2484	MISSION SUPPORT	Meter No: 01266399
2490	GATEWAY CLUB	Meter No: 11140791
2503	WARHAWK POOL B	Meter No: 69683760
2544	VISITING OFFICERS QTRS V	Meter No: 85018607
2847	TEMPORARY LIVING FAC V	Meter No: 61511150
2857	TEMPORARY LIVING FAC V	Meter No: 61511156
2867	TEMPORARY LIVING FAC V	Meter No: 61511138
2901	GOLF COURSE CLUBHOUSE	Meter No: 86306853
2954	RIDING STABLES	Meter No: 87530234
2954	RIDING STABLES	Meter No: 857530735
3350	MODULAR MEDICAL CLINIC	Meter No: 64034238
3450	MEDICAL MAINTENANCE FAC	Meter No: 64034234
3610	TEMPORARY LIVING FAC N	Meter No: 84197482
3610	TEMPORARY LIVING FAC N	Meter No: 84197481
3610	TEMPORARY LIVING FAC N	Meter No: 84197483
3748	3748 WHMC WAREHOUSE	Meter No: 84005908
3750	3750 WHMC WAREHOUSE	Meter No: 82824676
3810	3810 FISHER HOUSE #1 N	Meter No: 88004120
3812	3812 FISHER HOUSE #2 N	Meter No: 93705384
3885	3885 MARKSMANSHIP TRAINING	Meter No: 30976473
4430	4430 CLINICAL INVESTN MED FAC	Meter No: 75787849
4550	4550 WHMC MEDICAL FAC	Meter No: 62237081
4602	4602 MACKOWN DENTAL CLINIC	Meter No: 61321282
4883	4883 WHMC INCINERATOR	Meter No: 80127949
5008	5008 VEHICLE MAINTENANCE FAC N	Meter No: 76354974
5075	5075 COLD STORAGE FACILITY V	Meter No: 70418772
5160	5160 LG COMPLEX WAREHS/ADMIN N	Meter No: 31406600
5290	5290 LACKLAND INDEP SCH DIST	Meter No: 82073034
5311	5311 BASE LEGAL OFFICE W	Meter No: 64036824
5311	BASE LEGAL OFFICE W	Meter No: 65208339
5408	BOB HOPE THEATER V	Meter No: 64034237
5447	BX VENDING MACHINES W	Meter No: 62083799
5449	GATE-WAY STORE W	Meter No: 14656423
5450	BASE CONTRACTING SQUADRON N	Meter No: 80158998
5460	CIVIL ENGINEERING SQ N	Meter No: 80136779
5497	CE (MAINTENANCE SHOP) N	Meter No: 85020133
5506	ARNOLD HALL REC CTR SNK/B	Meter No: 14611027
5595	CIVIL ENGINEERING HQ N	Meter No: 85020121
5616	MILITARY CBPO-37TRW/FM V	Meter No: 63185241
5725	RECRUIT PROCESSING	Meter No: 64469183
5725	RECRUIT PROCESSING	Meter No: 30924774
6275	RH&T, 06 SQ B	Meter No: 70419348
6275	RH&T, 06 SQ B	Meter No: 70419338
6300	GATEWAY CHAPEL # 8 V	Meter No: 70548504
6329	THRIFT SHOP W	Meter No: 01125514

Building	Building Description	Meter Description
6359	AETC BAND W	Meter No: 64034239
6418	DUNN DENTAL CLINIC	Meter No: 30937065
6420	737 TRG HQ N	Meter No: 86408155
6475	BX FACILITY	Meter No: 01552936
6475	BX FACILITY	Meter No: 56397105
6475	BX FACILITY	Meter No: 70419323
6476	SKYLARK BOWLING ALLEY	Meter No: 70419339
6482	SKYLARK SWIMMING POOL N	Meter No: 80122023
6576	SKYLARK REC CTR SNK BAR V	Meter No: 14623356
6612	BASE DISPENSARY	Meter No: 31041325
6659	MILITARY CLOTHING SALES	Meter No: 64034235
7037	BX MINI MALL FACILITY	Meter No: 70414800
7065	RH&T (IAAFA/PEB/WELLNESS)	Meter No: 70419334
7065	RH&T (IAAFA/PEB/WELLNESS)	Meter No: 70419346
7080	TV PRODUCTION FACILITY B	Meter No: 62172696
7214	SVS SUPPLY/NAF V	Meter No: 1233969
7243	37 COMM PUBS & POST OFF	Meter No: 14578812
7246	CHAPARRAL REC CTR SNK BAR	Meter No: 14623354
7249	TOPS IN BLUE V	Meter No: 62885473
7346	CHAPARRAL GYMNASIUM V	Meter No: 85725485
7348	TECH TRNG CLASSROOM K	Meter No: 64034942
7348	TECH TRNG CLASSROOM K	Meter No: 64034241
7359	CENTRAL CHILLER PLANT V	Meter No: 62085295
7390	SVS RECYCLING PLANT	Meter No: 84312318
7400	CENTRAL CHILLER PLANT V	Meter No: 64034941
7426	DLI OFFICERS QUARTERS N	Meter No: 84040331
7426	DLI OFFICERS QUARTERS N	Meter No: 84040328
7429	CENTRAL HEATING & A/C PLT N	Meter No: 84012171
7429	CENTRAL HEATING & A/C PLT N	Meter No: 84914970
7435	DLI STUDENT ENLISTED HSG N	Meter No: 84914964
7436	DLI STUDENT ENLISTED HSG N	Meter No: 84405876
7437	DLIELC ADMINISTRATION N	Meter No: 84914968
7445	DLI SEBILLE HALL-ACADEMIC C	Meter No: 64485970
7447	DLIELC LIBRARY/STORAGE B	Meter No: 84914962
7532	DLI AMIGO INN DINING HALL N	Meter No: 84914972
7535	DLI ACADEMIC AND HQ N	Meter No: 31042914
7595	DOD DOG CENTER, VET V	Meter No: 84207199
8200	LACKLAND INDEP SCH DIST	Meter No: 85627031
8200	LACKLAND INDEP SCH DIST	Meter No: 82676754
8205	YOUTH CENTER V	Meter No: 64034242
8210	CHILD CARE CENTER B	Meter No: 70258293
8240	LACKLAND INDEP.SCHOOL	Meter No: 01292538
8265	LACKLAND INDEP SCH DIST	Meter No: M01319357
8400	COMMISSARY	Meter No: 30891382
8400	COMMISSARY	Meter No: 55291312
8700	CE ZONE AMU #5 N	Meter No: 64621987
9020	RH&T (200 PN) V	Meter No: 85640790

Building	Building Description	Meter Description
9030	737 TRG HEAD QTRS ANNEX V	Meter No: 91400098
9030	737 TRG HEAD QTRS ANNEX V	Meter No: 90198874
9038	RH&T (200 PN) V	Meter No: 91400100
9038	RH&T (200 PN) V	Meter No: 90108912
9050	RH&T (600 PN) V	Meter No: 90108910
9085	RH&T, 02 SQ V	Meter No: 70419340
9085	RH&T, 02 SQ V	Meter No: 70419335
9110	RH&T, 01 SQ V	Meter No: 70419342
9110	RH&T, 01 SQ V	Meter No: 70419336
9121	CE ZONE AMU #3 N	Meter No: 85018606
9122	RH&T(600PN) VISITOR'S CTR V	Meter No: 90108909
9122	RH&T(600PN) VISITOR'S CTR V	Meter No: 89639101
9210	RH&T V	Meter No: 63185240
9210	RH&T V	Meter No: 63185239
9225	CRYPTO TRAINING V	Meter No: 82707209
9225	CRYPTO TRAINING V	Meter No: 82731381
9269	FAA RADAR TOWER	Meter No: 38235568
9282	BLOOD BANK	Meter No: 64034248
9310	RH&T V	Meter No: 70431692
9310	RH&T V	Meter No: 64034939
9410	RH&T V	Meter No: 70419341
9410	RH&T V	Meter No: 70419343
9512	MAIN ELEC SWITCH STN	Meter No: 31417965
9512	9512 MAIN ELEC SWITCH STN	Meter No: 31417971
9512	MAIN ELEC SWITCH STN	Meter No: 31631613
9512	MAIN ELEC SWITCH STN	Meter No: 31042040
9512	MAIN ELEC SWITCH STN	Meter No: 31042038
9512	MAIN ELEC SWITCH STN	Meter No: 31042037
9512	MAIN ELEC SWITCH STN	Meter No: 31042035
9512	MAIN ELEC SWITCH STN	Meter No: 31042039
9512	MAIN ELEC SWITCH STN	Meter No: 31042032
9512	MAIN ELEC SWITCH STN	Meter No: 31042033
9512	MAIN ELEC SWITCH STN	Meter No: 31045929
9512	MAIN ELEC SWITCH STN	Meter No: 31045931
9512	MAIN ELEC SWITCH STN	Meter No: 31045930
9512	MAIN ELEC SWITCH STN	Meter No: 31045932
10050	NAVY BEQ N	Meter No: 84855855
10055	NAVY BEQ N	Meter No: 84854163
10056	CENTRAL CHILLER PLANT N	Meter No: 70419330
10060	NAVY BEQ HOUSING/STORAGE N	Meter No: 84855853
10070	NAVY BEQ N	Meter No: 84854164
10075	NAVY BEQ N	Meter No: 84855852
10175	10175 37TRG MESQUITE DINING H. N	Meter No: 85018605
10201	FY86 UEPH N	Meter No: 82600826
10205	FY86 UEPH N	Meter No: 82600828
10207	FY86 UEPH N	Meter No: 82600830
10207	FY86 UEPH N	Meter No: 82600829

Building	Building Description	Meter Description
10207	FY86 UEPH N	Meter No: 82600827
10215	SECURITY POLICE TRNG FAC N	Meter No: 84855851
10230	US POST OFFICE/BX OUTLET	Meter No: 14611029
10263	FY87 UEPH N	Meter No: 84941809
10416	RH&T, 03 SQ V	Meter No: 70419345
10416	RH&T, 03 SQ V	Meter No: 70419344
10500	TECH TNG CLASSROOMS K	Meter No: 70418207
10500	TECH TNG CLASSROOMS K	Meter No: 52732331
10500	TECH TNG CLASSROOMS K	Meter No: 70418775
10534	FY85 UEPH N	Meter No: 75840745
10541	FY85 UEPH N	Meter No: 75840747
10547	FY85 UEPH N	Meter No: 75878998
10634	NCO ACADEMY K	Meter No: 64036826
10634	NCO ACADEMY K	Meter No: 64034246
10650	VISITING AIRMAN QTRS B	Meter No: 70582525
10652	VISITING AIRMAN QTRS B	Meter No: 80039868
10656	VISITING AIRMAN QTRS B	Meter No: 70582527
10658	CENTRAL CHILLER/HTG PLT N	Meter No: 70582528
10658	CENTRAL CHILLER/HTG PLT N	Meter No: 84010179
10670	CE ZONE AMU #2 N	Meter No: 80053132
10701	TECH TRAINING CLASSROOMS N	Meter No: 82301480
10800	TECH TNG ADMINISTRATION N	Meter No: 72950823
10802	VISITING AIRMAN QTRS N	Meter No: 72950824
10804	VISITING AIRMAN QTRS N	Meter No: 72950821
10806	VISITING AIRMAN QTRS N	Meter No: 72950822
10808	CENTRAL CHILLER PLANT N	Meter No: 72950874
10810	37 TRG LIVE OAK INN DHALL N	Meter No: 83062980
10900	TRANSPORTATION TRAINING N	Meter No: 01220850

J11.5.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in **Table 6**. All new secondary meters shall be pulse initiating meters compatible with the Lackland AFB Energy Management Control System (EMCS). New secondary meters shall be installed IAW Paragraph C.13, Transition Plan. After installation, the Contractor shall maintain and read these meters IAW Paragraphs C.3 and J11.6 below.

TABLE 6
New Secondary Meters
Electric Distribution System Lackland AFB

Building	Building Description	Description
2300	MITCHELL HALL	MWR
2433	SMOKING JOES BBQ	MWR
4600	MRI CLINIC	WHMC
4602	DENTAL CLINIC	WHMC
7041	CRAFT CTR	MWR
7245	AUTO HOBBY	MWR
1354	OUTPATIENT	WHMC
1355	OUTPATIENT	WHMC

Building	Building Description	Description
7241	CAR WASH	MWR
8410	SATELITE PHARMACY	WHMC
8174	ROD/GUN CLUB	MWR
10056	NEW CHILLER PLT	CE
140	GYM	MWR
2850	FAM CAMP AREA	MWR
3550	ADMIN OFFICE	WHMC
3746	CLINIC	WHMC
4370	CAMP RESINGTON	WHMC
5290	LADYS FITNESS GYM	MWR
144	POOL	MWR
2900	GOLF CLUB MAINT	MWR
6246	OFFICE/STORAGE	WHMC
7000	OFFICE/STORAGE	WHMC
7065	OFFICE/STORAGE	WHMC
7341	CHAPARAL POOL	MWR
1465	DINING HALL	SVS
3664	ANIMAL CLINIC	MWR
4550	SUB-M DEFNS PRINT	WHMC
4890	ANIMAL HOLD AREA	WHMC
6576	SKYLARK REC CTR	SVS
10900	NEW VEH TNG FACIL	CE

J11.6 Submittals

The Contractor shall provide the Government submittals for the following:

1. Invoice (IAW G.2). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to:

Name:

Address:

Phone number:

2. Outage Report. The Contractor's monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall include the following information for Scheduled and Unscheduled outages:

Scheduled: Requestor, date, time, duration, facilities affected, feedback provided during outage, outage notification form number, and digging clearance number.

Unscheduled: Include date, time and duration, facilities affected, response time after notification, completion times, feedback provided at time of outage, specific item failure, probability of future failure, long term fix, and emergency digging clearance number.

Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to:

Name:

Address:

Phone number:

3. **Meter Reading Report.** The monthly meter reading report shall show the current and previous month readings for all secondary meters. The Contractor's monthly meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 15th of each month for the previous month. Meter reading reports shall be submitted to:

Name:

Address:

Phone number:

4. **System Efficiency Report.** The Contractor shall submit a system efficiency report in a format proposed by the Contractor and accepted by the Contracting Officer. The Contracting Officer will determine the frequency of the report based on Government requirements. System efficiency reports shall be submitted to:

Name:

Address:

Phone number:

J11.7 Energy Saving Projects

IAW Paragraph C.3, Requirement, the following projects have been implemented on the distribution system by the Government for energy conservation purposes.

- There are three ESPC projects for Wilford Hall Medical Center. These projects are to replace the existing lighting system with a more efficient lighting systems within the building foot print. These projects are all internal to the buildings.

J11.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the Lackland AFB boundaries.

J11.9 Off-Installation Sites

No off-installation sites are included in the sale of the Lackland AFB electric distribution system.

J11.10 Specific Transition Requirements

IAW Paragraph C.13, Transition Plan, **Table 7** provides a listing of service connections and disconnections required upon transfer.

TABLE 7
Service Connections and Disconnections
Electric Distribution System Lackland AFB

Location	Description
None	The Government does not require any connection or disconnections during the transition period.

J11.11 Government Recognized System Deficiencies

Table 8 provides a listing of system improvements that the Government has planned. The Government recognizes these improvement projects as representing current deficiencies associated with the Lackland AFB electric distribution system. If the electric distribution system is sold, the Government will not accomplish these planned improvements. The Contractor shall make a determination as to its actual need to accomplish and the timing of any and all such planned improvements. Capital upgrade projects shall be proposed through the Capital Upgrades and Renewal and Replacement Plan process and will be recovered through Schedule L-3. Renewal and Replacement projects will be recovered through Sub-CLIN AB.

TABLE 8
System Deficiencies
Electric Distribution System Lackland AFB

Project Identifier/Location	Project Description
MPLS 961019	Electrical Circuit for Main Base
MPLS 961033	PCB Transformers have been replaced.
MPLS 961020	Construct New Circuit 9 to Selfridge
MPLS 971044	Electrical Underground at Luke Blvd
MPLS 971001A	Electrical Underground at Goodfellow St
MPLS 971001B	Electrical Underground at Pepperrell St
MPLS 981001A	Electrical Underground at Ladd St
MPLS 981001B	Electrical Underground at Parade Field
MPLS 991001A	Electrical Underground at 2300-2500 Area
MPLS 991001B	Electrical Underground at Bong Ave
MPLS001001B	Circuit 5, Across from Military Hwy
MPYJ961039	Replace LTA Switching Station